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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,565	03/07/2001	Yutaka Mineo	19036/37126	.3722

7590

05/08/2002

Natè F Scarpelli  
Marshall O'Toole Gerstein Murray & Borun  
233 South Wacker Drive  
6300 Sears Tower  
Chicago, IL 60606-6402

EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

7

DATE MAILED: 05/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-7

# Office Action Summary

Application No.

09/786,565

Applicant(s)

MINEO, YUTAKA

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Objection*

1. Claim 7 is objected to as being of improper dependent form. "According to any of Claims 1 to 6" should be re-written as "according to any one of Claims 1 to 6." Correction is required.

### ***Claim Rejections – 35 USC § 103(a)***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. (U.S. 5,900,309) in view of JP 07-005305.
4. Kitamura discloses a light diffusing sheet with a transparent substrate having resin particles together with a resin binder with the resin particles dispersed in the sheet (column 1, line 65 through column 2, line 10) where the average diameter of the resin particles is 1 to 500 um and the ratio of the resin binder to the fine resin particles is 70 to 3 weight parts of the resin binder (column 2, line 4-5 and column 2, line 16-19). Kitamura discloses the binder is made of silicon which is larger than the average diameter of the fine resin particles (column 4, line 2-8). The reference teaches a backlight with a light source provided behind a display panel used to display images, where a light diffusing sheet is used for the construction of the backlight

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(column 1, lines 13-24) where the panel is analogous to a light guiding plate. Kitamura does not disclose an inorganic filler made of colloidal silica. JP '5305 teaches a light diffusion sheet comprising a mixture of a binder and beads coated on the upper surface of a transparent base sheet (abstract) where the diffusion layer is made by dispersing resin beads and fine inorganic filler particles in a binder with silica being used as the inorganic filler. Kitamura and JP '5305 are analogous art because they are from the same field of light diffusion sheets. It would have been obvious to one of ordinary skill in the art to include the inorganic filler of silica in the light diffusion sheet of Kitamura because JP '5305 teaches the filler helps improve the brightness of the back light. Although neither reference does not specifically disclose a colloidal silica, it would have been obvious for a person skilled in the art to use colloidal silica in place of silica because they are similar species of inorganic fillers.

***Claim Rejections – 35 USC § 103(a)***

5. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. (U.S. 5,900,309) in view of JP 07-005305 further in view of JP 8-227005.
6. Kitamura in view of JP '5305 are relied upon for claims 1-3 and 7. Kitamura does not disclose a sticking proof layer provided on a rear surface side of the base sheet. JP '7005 teaches a light diffusion surface on the front surface of a base material sheet and the provision of a sticking prevention layer on the rear side of the base sheet composed of beads and binders (abstract). All of the references are analogous art because they are from the same field of light diffusing material. It would have been obvious to one of ordinary skill in the art to include the

sticking-proof layer on the rear of the transparent substrate of Kitamura because JP '7005 teaches the addition of this sticking proof layer helps to increase the luminance of the backlight display screen.

7. Fujissawa et al. (U.S. 6,002,464) is cited as relevant art for disclosing a light diffusing sheet of clear resin incorporated with a light diffusing material.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson  
Examiner  
Art Unit 1774

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

